ABSTRACT OF THE DISCLOSURE

It is an object to shorten a time required for a processing of linking components and to reduce the amount of a memory to be used during the linkage. When creating a component to be referred to another component, a declaration of a symbol in a source file is converted into an original symbol name through a compile processing to be caused to correspond to a symbol value to be an offset address in an object file. When creating a component to be a referent, a symbol information table in which the original symbol name is replaced with a symbol ID to be caused to correspond to the symbol value. Moreover, the original symbol name and the symbol ID are caused to correspond to each other so that an external symbol information file is created. In a component to be a reference source, the original symbol name referring to another component is replaced with a pair of the component ID and the symbol ID by using the file. Thus, a symbol reference information table is created. Information about the linkage of the components to be the reference source and the referent are collated by using the symbol ID based on the table and the table. Since the symbol ID is short, a time required for collating the symbols can be shortened and the amount of the memory to be used can be reduced.

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